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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/469,754	12/22/1999	YASUTAKA TSUKAMOTO	2271/53999-A	5345

7590

06/07/2005

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EXAMINER

CRAIG, DWIN M

ART UNIT	PAPER NUMBER
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2123

DATE MAILED: 06/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/469,754

Applicant(s)

TSUKAMOTO ET AL.

Examiner

Dwin M Craig

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 2/17/2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

1. Claims 1-40 have been presented for reconsideration in view of Applicant's arguments and amended claim language.

Response to Arguments

2. Applicant's arguments filed on 2-17-2005 have been fully considered. Examiners response is as follow:

2.1 Regarding Applicant's response to the Examiner's objections to claims 4, 12 and 20.

The Examiner thanks the Applicant for amending claims 4, 12 and 20 and withdraws the objection to the claims.

2.2 Regarding the Applicant's response to the 35 U.S.C. 103 rejections of Claims 1, 9, 17, 25, 29, 33, 37, 38 and 39 over *Bransen et al.* in view of *McNelly et al.*

Applicant argued (*pages 18 and 19 of the 2-17-2004 response*),

Brasen, as understood by Applicants, is directed to automatic power vector generation for sequential circuits. Brasen discloses logic simulation only for basic cells (i.e. logic gates and the like). A block BLOCK2 (see FIGS. 7 and 8) of Brasen is the sole disclosure in Brasen of a mega-cell. The mega-cell of Brasen is said to be RAM or ROM which has "fixed power requirements".

Since the mega-cell of Brasen has fixed power requirements, one skilled in the art would not understand Brasen to be teaching or suggesting that logic simulation is needed for estimation of power consumption by the mega-cell.

After careful review of the prosecution record, the Examiner has been persuaded by Applicants' arguments and withdraws the prior art rejections of the Applicants' claims. It is further noted that the Applicant has clearly argued that the mega-cells, as expressly claimed in Applicant's independent claims, are required to be simulated and that the resulting power data

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produced by that simulation is used in the determination of the alternating and direct current calculations as claimed in Applicants' claim language.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. **Claims 1-40** are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over **Claims 1-6 of U.S. Patent No. 6,094,527**. Although the conflicting claims are not identical, they are not patentably distinct from each other because It would have been obvious, to one of ordinary skill in the art, at the time the invention was made, to have incorporated the use of record able media with Applicant's simulation methods because of the ease of which a simulation software program could be distributed and used by placing executable code on computer readable media.

As regards the claimed limitations, the Examiner notes the following, using independent claim one from the 09/469,754 application and comparing this claim with claim one from U.S. Patent 6,094,527.

Both independent claims expressly claim the following;

1. *"simulating logic of basic and mega-cells of the integrated circuit"*
2. *"estimating a first value of electric power consumed by said mega cells based on said logic simulations and pre-established power consumption data"*
3. *"estimating a current consumed by mega cells by obtaining logic states for each mega cell"*
4. *"determining an average operating frequency for each logic state, and determining an alternating current component and a direct current component for each logic state to calculate said current consumed by the mega cells"*
5. *"estimating a second value of electric power consumed by said basic cells based on said logic simulations and pre-established power consumption data"*
6. *"including estimating a current consumed by the basic cells"*
7. *"combining said first and second values to obtain the power consumption of the integrated circuit"*

The Examiner notes that all of the above listed expressly claimed limitations are present in both the claims of the instant Application and the issued U.S. Patent.

Allowable Subject Matter

4. **Claim 1-40** are allowed. For the reasons for allowance please see the Examiner's response to Applicants arguments in section **2.2** of this Office Action.

Conclusion


5. **Claims 1-40** are rejected. This Office Action is **Non-Final**.

5.1 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dwin M Craig whose telephone number is (571) 272-3710. The examiner can normally be reached on 10:00 - 6:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo P Picard can be reached on (571)272-3749. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DMC


SAMUEL BRODA, ESQ.
PRIMARY EXAMINER